

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|-----------------|----------------------|-------------------------|------------------|--|
| 09/990,229 | 11/21/2001 | Yi-Jen Cheng | U 013725-5 | U 013725-5 1880 | |
| | 7590 09/22/2003 | | | | |
| Ladas & Parry 26 West 61st Street New York, NY 10023 | | | EXAMINER | | |
| | | | LAU, TUNG S | | |
| | | | ART UNIT | PAPER NUMBER | |
| | • | | 2863 | | |
| | | | DATE MAILED: 09/22/2003 | 1 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ı | | Application No. | Applicant(s) | | | |
|---|--|---------------------------------------|--|--|--|--|
| · Office Action Summary | | 09/990,229 | CHENG, YI-JEN | | | |
| | | Examiner | Art Unit | | | |
| | | Tung S Lau | 2863 | | | |
| Period for F | The MAILING DATE of this communication a Reply | appears on the cover sheet with the o | correspondenc address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| 1)⊠ R | Responsive to communication(s) filed on \underline{o} | 5 September 2003 . | | | | |
| 2a)□ T | his action is FINAL . 2b)⊠ | This action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Cl | aim(s) 1-6 is/are pending in the applicatio | on. | | | | |
| 4a) | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5)⊠ Cla | aim(s) <u>4-6</u> is/are allowed. | | | | | |
| 6)⊠ Cla | aim(s) <u>1 and 2</u> is/are rejected. | • | | | | |
| 7)⊠ CI | aim(s) <u>3</u> is/are objected to. | | | | | |
| 8) Cla | aim(s) are subject to restriction and Papers | I/or election requirement. | | | | |
| 9)□ The | specification is objected to by the Examil | ner. | | | | |
| 10)□ The | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| А | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) The | proposed drawing correction filed on | is: a)□ approved b)□ disappro | ved by the Examiner. | | | |
| | If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)□ <i>A</i> | a)☐ All b)☐ Some * c)☐ None of: | | | | | |
| 1.[| Certified copies of the priority documents have been received. | | | | | |
| 2.[| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| | Copies of the certified copies of the pri application from the International E the attached detailed Office action for a lis | Bureau (PCT Rule 17,2(a)). | - | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 2) Notice of | References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-948) on Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal P | (PTO-413) Paper No(s) latent Application (PTO-152) | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
 form the basis for the rejections under this section made in this Office action:
 A person shall be entitled to a patent unless
 - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lubin (U.S. Patent 5,909,516).

Regarding claim 1:

Lubin discloses a method for testing eye diagram characteristics, comprising the following steps, sending a precondition from a mainframe to a chip under test (fig.2), and reading GLPF signals from the chip under test (Col. 4, Lines 30-44); digitalizing and normalizing the GLPF signals (fig. 1, unit 100); reconstructing an eye diagram according to the normalized GLPF signals (fig. 3, 4); analyzing an error between parameters of the eye diagram and a predefined specification (fig. 3,4, Col. 3, lines 34-44); and deciding if the chip under test is valid according to the error analysis (Col. 3, lines 34-44).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

a. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lubin (U.S. Patent 5,909,516) in view of Schreiber et al. (U.S. Patent 4,268,861).

Lubin disclose a method including the subject matter discussed above except the use of width of the eye diagram, height, cross ratio of the eye diagram. Schreiber disclose the use of width of the eye diagram, height, cross ratio of the eye diagram (fig. 2), in order to allows the coder to be optimized for better edge reproduction (Col. 3, Lines 3-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lubin to have the use of width of the eye diagram, height, cross ratio of the eye diagram taught by Schreiber in order to allows the coder to be optimized for better edge reproduction (Col. 3, Lines 3-11).

Claim Objections

3. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach computing positions of zero-crossing points according to the average value; and utilizing a transmission rate of the GLPF signals as a cycle time of the eye diagram and overlapping a series of GLPF signals into a cycle period of the eye diagram.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Allowable Subject Matter

4. Claims 4-6 are allowed.

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance: Independent claim 4 contains allowable subject matter. None of the prior art of record shows or fairly suggests the claimed invention.

Regarding claim 4:

The primary reason for the allowance of claim 4 is the inclusion of the apparatus for testing eye diagram characteristics including a mechanical arm connected to the mainframe for carrying the chip under test. It is these features found in the claim, as

they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes this claim allowable over the prior art.

Claims 5-6 are allowed due to their dependency on claim 4.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 703-305-3309. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TC2800 FAX Telephone Numbers: 703-872-9306

TC2800 Customer Service FAX - (703) 872-9317

TL

John Barlow
Supervisory Patent Examiner
Technology Center 2800